

Appl No. 10/727,400  
Amdt dated September 3, 2004  
Reply to Office Action dated August 26, 2004

PATENT

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

Claims 1.-3. (CANCELED)

**Claim 4. (PREVIOUSLY PRESENTED) An information processing device comprising:**

a heat conductive element;  
a processor in thermal communication with said heat conductive element, wherein said processor generates heat when energized, and wherein said heat conductive element dissipates heat generated by said processor;  
a circuit board comprising a mounting area, wherein said processor is mounted at said mounting area; and  
a compressible element,  
wherein the circuit board is between the compressible element and the processor.

**Claim 5. (PREVIOUSLY PRESENTED) The information processing device of claim 4 wherein the information processing device is a cartridge.**

**Claim 6. (PREVIOUSLY PRESENTED) The information processing device of claim 4 wherein the compressible element pushes the circuit board and the processor toward the heat conductive element.**

**Claim 7. (PREVIOUSLY PRESENTED) The information processing device of claim 4 wherein the heat conductive element is a heat dissipation plate.**

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**Claim 8. (PREVIOUSLY PRESENTED)** The information processing device of claim 4 wherein the heat conductive element comprises aluminum.

**Claim 9. (PREVIOUSLY PRESENTED)** The information processing device of claim 4 wherein the compressible element comprises silicon rubber.

**Claim 10. (PREVIOUSLY PRESENTED)** The information processing device of claim 4 further comprising an electrical contact at an edge region of the circuit board.

**Claim 11. (PREVIOUSLY PRESENTED)** The information processing device of claim 4 wherein the circuit board is a printed circuit board.

**Claim 12. (PREVIOUSLY PRESENTED)** The information processing device of claim 4 further comprising a ROM on the circuit board.

**Claim 13. (PREVIOUSLY PRESENTED)** The information processing device of claim 4 further comprising a heat dissipating material between the heat conductive element and the processor, wherein the heat dissipating material directly contacts the processor and the heat conductive element.

**Claim 14. (PREVIOUSLY PRESENTED)** The information processing device of claim 13 wherein the heat dissipating material is formed from a non-solid material.

**Claim 15. (PREVIOUSLY PRESENTED)** The information processing device of claim 4 wherein the compressible element comprises an elastic material.

**Claim 16. (CURRENTLY AMENDED)** The information processing device of claim 4 further comprising a heat dissipating material between the heat conductive element and the processor, wherein the heat dissipating material comprises silicon rubber.

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**Claim 17. (PREVIOUSLY PRESENTED)** The information processing device of claim 4 wherein the processor is a microprocessor.

**Claim 18. (PREVIOUSLY PRESENTED)** The information processing device of claim 4 further comprising a plurality of pins coupled to the processor, the pins being perpendicular to the orientation of the circuit board.

**Claim 19. (CURRENTLY AMENDED)** An information processing device comprising:

a heat conductive element;  
a processor in thermal communication with said heat conductive element, wherein said processor generates heat when energized, and wherein said heat conductive element dissipates heat generated by said processor;

a circuit board comprising a mounting area, wherein said processor is mounted at said mounting area;

a heat dissipating material between the heat conductive element and the processor, wherein the heat dissipating material directly contacts the heat conductive element and the processor; and

an insertion plug including an electrical contact formed at an end region of the circuit board,

and wherein the information processing device further comprises a plurality of pins coupled to the circuit board, the plurality of pins oriented perpendicular to the orientation of the circuit board.

**Claim 20. (PREVIOUSLY PRESENTED)** The information processing device of claim 19 wherein the heat conductive element is a plate.

**Claim 21. (PREVIOUSLY PRESENTED)** The information processing device of claim 19 wherein the heat dissipating material has a heat conductance rate of 1 W/m·K or more.

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**Claim 22. (PREVIOUSLY PRESENTED)** The information processing device of claim 19 wherein the heat dissipating material is formed from a non-solid material.

**Claim 23. (CANCELED)**

**Claim 24. (PREVIOUSLY PRESENTED)** The information processing device of claim 19 wherein the heat conductive element comprises aluminum.

**Claim 25. (PREVIOUSLY PRESENTED)** The information processing device of claim 19 wherein the heat dissipating material comprises silicon rubber.

**Claim 26. (PREVIOUSLY PRESENTED)** The information processing device of claim 19 wherein the information processing device is in the form of a cartridge.

**Claim 27. (PREVIOUSLY PRESENTED)** The information processing device of claim 19 wherein the circuit board is a printed circuit board.

**Claim 28. (PREVIOUSLY PRESENTED)** The information processing device of claim 19 further comprising a biasing element adapted to push the circuit board towards the heat conductive element.

**Claim 29. (PREVIOUSLY PRESENTED)** The information processing device of claim 19 further comprising a housing configured to protect the processor.

**Claim 30. (CURRENTLY AMENDED)** The information processing device of claim 19 wherein the heat conductive element is in the form of a plate, and wherein the information processing device further comprises a ROM on the circuit board a plurality of pins coupled to the processor.